

What is claimed is:

1. A device for coupling in light for illuminating a preparation in the beam path of a microscope which has an objective and tube lens and a reflected light illumination device which comprises a light source and a condenser, wherein the condenser images the light source in the field diaphragm plane and, in so doing, defines an optical axis, comprising:

an at least partially reflecting element being provided in the vicinity of the field diaphragm plane and reflecting light from a second light source into the beam path at a slight angle relative to the optical axis.

2. The device for coupling light into the beam path of a microscope according to claim 1, wherein the second light source is a laser.

3. The device for coupling light into the beam path of a microscope according to claim 1, wherein the angle at which the light of the second light source is reflected into the beam path is adjustable.

4. The device for coupling light into the beam path of a microscope according to claim 1, wherein the at least partially reflecting element reflects the light of the second light source into the beam path parallel to the optical axis.

5. The device for coupling light into the beam path of a microscope according to claim 1, wherein the at least partially reflecting element is arranged at an angle of  $45^\circ$  to the optical axis.

6. The device for coupling light into the beam path of a microscope according to claim 1, wherein a light-conducting fiber is provided which is held in such a way that the at least partially reflecting element is acted upon by the light of the second light source by an optical imaging system.

7. The device for coupling light into the beam path of a microscope according to claim 6, wherein the holder of the light-conducting fiber has a device for adjusting the inclination.

8. The device for coupling light into the beam path of a microscope according to claim 7, wherein the holder of the light-conducting fiber has a base inclination relative to the optical axis.

9. The device for coupling light into the beam path of a microscope according to claim 6, wherein the optical imaging system can be focused.

10. The device for coupling light into the beam path of a microscope according to claim 6, wherein the at least partially reflecting element, the holder of the light-conducting fiber and the optical imaging system are combined in a mechanical unit.

11. The device for coupling light into the beam path of a microscope according to claim 10, wherein the mechanical unit is constructed as a slide.